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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Ahn *et al.*
Serial No.: 10/573,359
Filed: 3/24/2006
Entitled:

Group No.: not assigned
Examiner: not assigned

**Process for Purifying Human Thrombopoietin
With High Content of Sialic Acid**

**INFORMATION DISCLOSURE
STATEMENT TRANSMITTAL**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING UNDER 37 CFR § 1.8(a)(1)(i)(A)

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: February 26, 2007

By: _____

Mary Ellen Waite
Mary Ellen Waite

Sir or Madam:

Enclosed please find an Information Disclosure Statement and Form PTO-1449, including references, in the above-identified application, for filing in the U.S. Patent Office.

This Information Disclosure Statement and PTO Form-1449 is being filed before the issuance of a first Office Action, therefore, Applicants believe no fee is required.

The Commissioner is hereby authorized to charge any additional fee or credit overpayment to our Deposit Account No. 08-1290. An originally executed duplicate of this transmittal is enclosed for this purpose.

Dated: February 26, 2007

Tanya A. Arenson
Tanya A. Arenson
Registration No. 47,391

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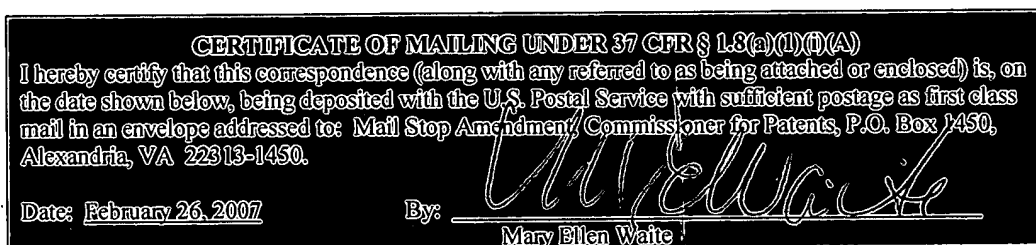


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INFORMATION DISCLOSURE STATEMENT

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Sir or Madam:

The citations listed below may be material to the examination of the above-identified application, and are therefore submitted in compliance with the duty of disclosure defined in 37 C.F.R. §§ 1.56 and 1.97. The Examiner is requested to make these citations of official record in this application.

- U.S. Patent No. 5,879,673
- U.S. Patent No. 5,696,250
- U.S. Patent No. 5,989,538
- U.S. Patent No. 5,633,162
- U.S. Patent No. 5,744,587
- WO 00/00612 A
- WO 03/057866 A

- EP 0 668 352 A
- WO 98/52598 A
- CN 1 369 507 A
- WO 95/18868
- WO95/21919
- WO 95/18858
- WO96/25498
- O'Connor, "Chromatography of recombinant proteins," *Developments in Biological Standardization*, 97:39-47 (1999)
- Lok et al., "Promotion of megakaryocyte progenitor expansion and differentiation by the c-Mpl ligand thrombopoietin," *Nature*, 369: 565-568 (1994)
- de Sauvage et al., "Stimulation of megakaryocytopoiesis and thrombopoiesis by the c-Mpl ligand," *Nature*, 369: 533-538 (1994)
- Miyazaki et al., *Experimental hematol.*, 22: 828 (1994)
- Shinjo et al., "Serum thrombopoietin levels in patients correlate inversely with platelet counts during chemotherapy-induced thrombocytopenia," *Leukemia*, 12: 295-300 (1998)
- Pascual-Castroviejo et al., "Hypomelanosis of ITO. A study of 76 infantile cases," *Brain Dev* 20(1): 36-43 (1998)
- Takeuchi et al., "Relationship between sugar chain structure and biological activity of recombinant human erythropoietin produced in Chinese hamster ovary cells.," *Proc. Natl. Acad. Sci. USA*. 86: 7819(1989)
- Morimoto, et al., "Biological and physicochemical characterization of recombinant human erythropoietins fractionated by Mono Q column chromatography and their modification with sialyltransferase," *Glycoconj J.*, 13(6): 1013-20(1996)
- Park et al., "Identification of functionally important residues of human thrombopoietin," *J. Biol. Chem.*, 273:256-261, 1998)

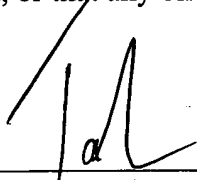
- Inoue et al., "Asn-linked sugar chain structures of recombinant human thrombopoietin produced in Chinese hamster ovary cells," Glycoconj J. 16(11):707-719 (1999)
- Kato W et al., "Purification and characterization of thrombopoietin," J Biochem 118(1):229-236 (1995)
- Kaszubska et al, "Expression, purification, and characterization of human recombinant thrombopoietin in Chinese hamster ovary cells," Protein Expression and Purification, 18:213-220 (2000)

Applicants wish to bring to the examiners attention that we are not providing copies of US Patents as instructed under 37 CFR 1.98(a)(2).

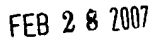
Applicants' herewith submit the Supplementary European Search Report from EP 03 75 1496.

This Information Disclosure Statement under 37 C.F.R. §§ 1.56 and 1.97 is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one or more of these citations constitutes prior art.

Dated: February 26, 2007



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Approved for use through 07/31/2006. OMB 0651-0031

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Substitute for form 1449/PTO

(Use as many sheets as necessary)

Complete if Known

Application Number	10/573,359
Filing Date	3/24/2006
First Named Inventor	Ahn et al.
Art Unit	not assigned
Examiner Name	not assigned
Attorney Docket Number	HANOL-10524

Sheet	1	of	4
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)	MM-DD-YYYY			
	6	WO 00/00612 A	01/06/2000	Chung et al.	entire document	
	7	WO 03/057866 A	07/17/2003	Lee et al.	entire document	
	8	EP 0 668 352 A	08/23/1995	Kirin Brewery	entire document	
	9	WO 98/52598 A	11/26/1998	Cohen et al.	entire document	
	10	CN 1 369 507 A	09/18/2002	Univ Nanjing	entire document	
	11	WO95/18868	07/13/1995	Cook et al.	entire document	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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		Art Unit	not assigned
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Sheet 3	of 4	Attorney Docket Number	HANOL-10524

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	15	O'Connor, "Chromatography of recombinant proteins," Developments in Biological Standardization, 97:39-47 (1999)	
	16	Lok et al., "Promotion of megakaryocyte progenitor expansion and differentiation by the c-Mpl ligand thrombopoietin," Nature, 369: 565-568 (1994)	
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	18	Miyazaki et al., Experimental hematol., 22: 828 (1994)	
	19	Shinjo et al., "Serum thrombopoietin levels in patients correlate inversely with platelet counts during chemotherapy-induced thrombocytopenia," Leukemia, 12: 295-300 (1998)	
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	21	Takeuchi et al., "Relationship between sugar chain structure and biological activity of recombinant human erythropoietin produced in Chinese hamster ovary cells," Proc. Natl. Acad. Sci. USA. 86: 7819(1989)	
	22	Morimoto, et al., "Biological and physicochemical characterization of recombinant human erythropoietins fractionated by Mono Q column chromatography and their modification with sialyltransferase," Glycoconj J., 13(6): 1013-20(1996)	
	23	Park et al., "Identification of functionally important residues of human thrombopoietin," J. Biol. Chem., 273:256-261, 1998)	
	24	Inoue et al., "Asn-linked sugar chain structures of recombinant human thrombopoietin produced in Chinese hamster ovary cells," Glycoconj J. 16(11):707-719 (1999)	

Examiner Signature	Date Considered
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1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37.CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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	25	Kato W et al., "Purification and characterization of thrombopoietin," J Biochem 118(1):229-236 (1995)	
	26	Kaszubska et al, "Expression, purification, and characterization of human recombinant thrombopoietin in Chinese hamster ovary cells," Protein Expression and Purification, 18:213-220 (2000)	

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